[4910-13-P]

#### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

14 CFR Part 39

[Docket No. FAA-2011-1259; Directorate Identifier 2011-NM-181-AD; Amendment

39-17059; AD 2012-10-10]

**RIN 2120-AA64** 

Airworthiness Directives; The Boeing Company Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model 777 airplanes. This AD was prompted by reports of corrosion damage on the outer diameter chrome surface of the horizontal stabilizer pivot pins. Micro-cracks in the chrome plating of the pivot pin, some of which extended into the base metal, were also reported. This condition, if not corrected, could result in a fractured horizontal stabilizer pivot pin. This AD requires replacing the existing horizontal stabilizer pivot pins with new or reworked pivot pins having improved corrosion resistance, doing repetitive inspections after installing the pivot pins, and doing corrective actions if necessary. We are issuing this AD to prevent a fractured horizontal stabilizer pivot pin, which may cause excessive horizontal stabilizer freeplay and structural damage significant enough to result in loss of control of the airplane.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; e-mail <a href="mailto:me.boecom@boeing.com">me.boecom@boeing.com</a>; Internet <a href="https://www.myboeingfleet.com">https://www.myboeingfleet.com</a>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <a href="http://www.regulations.gov">http://www.regulations.gov</a>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: James Sutherland, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6533; fax: 425-917-6590; e-mail: james.sutherland@faa.gov.

#### SUPPLEMENTARY INFORMATION:

### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM published in the <u>Federal Register</u> on December 6, 2011 (76 FR 76066). That NPRM proposed to replace the existing horizontal stabilizer pivot pins with new or reworked pivot pins having

improved corrosion resistance, doing repetitive inspections after installing the pivot pins, and doing corrective actions if necessary.

## **Comments**

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal (76 FR 76066, December 6, 2011) and the FAA's response to each comment.

## Request to Delay Rule Due to Pending Service Information

FedEx and All Nippon Airways (ANA) requested that the release date of the AD be postponed until Revision 1 of Boeing Alert Service Bulletin 777-55A0018 is issued. FedEx stated that the horizontal stabilizer jacking tool used for the pivot pin removal/installation procedure, as specified in Boeing Alert Service Bulletin 777-55A0018, dated July 27, 2011, is being re-designed, and suggested that the release date of the AD be postponed until re-design of the tool is completed and Revision 1 is issued. ANA noted that Boeing does not recommend accomplishing Boeing Alert Service Bulletin 777-55A0018, dated July 27, 2011, until the anti-rotation plates and jacking tool are available.

We do not agree to postpone issuing the final rule, because Boeing has issued Alert Service Bulletin 777-55A0018, Revision 1, dated March 6, 2012. That service bulletin includes the new anti-rotation plates, and, as an alternative to having the new anti-rotation plates, a procedure for reworking the existing anti-rotation plates. The pin removal tool is an optional tool allowing operators an alternate method to remove the horizontal stabilizer pivot pins without the jacking tool. The existing tool is applicable to line numbers 1 through 40, and Boeing has issued rework instructions for the operators to modify existing tools for all Model 777 airplanes. The scope of this AD has not been expanded. We have updated the references in paragraphs (c), (g), (h), and (i) of this AD

accordingly. In paragraph (j) of this AD, we are giving credit for actions done using Boeing Alert Service Bulletin 777-55A0018, dated July 27, 2011.

## Other Changes to NPRM (76 FR 76066, December 6, 2011)

The Repeat Interval columns of tables 2 and 3 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 777-55A0018, Revision 1, dated March 6, 2012, are corrected to include the phrase "after the most recent inspection." Therefore, we have removed the exception stated in paragraph (i)(1) of the NPRM (76 FR 76066, December 6, 2011).

#### Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting the AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (76 FR 76066, December 6, 2011) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (76 FR 76066, December 6, 2011).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

## **Costs of Compliance**

We estimate that this AD affects 155 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

#### **Estimated costs**

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Replacement of horizontal stabilizer pivot pins	16 work-hours X \$85 per hour = \$1,360	\$11,452	\$12,812	\$1,985,860
Repetitive inspections	22 work-hours X \$85 per hour = \$1,870 per inspection cycle	\$0	\$1,870 per inspection cycle	\$289,850 per inspection cycle

We estimate the following costs to do any necessary replacements that would be required based on the results of the inspections. We have no way of determining the number of aircraft that might need these replacements.

#### **On-condition costs**

Action	Labor cost	Parts cost	Cost per product
Pivot pin or spacer replacement	16 work-hours X \$85 per hour = \$1,360	\$11,452	\$12,812

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

# **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
  - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

## PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

## § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2012-10-10** The Boeing Company: Amendment 39-17059; Docket

No. FAA-2011-1259; Directorate Identifier 2011-NM-181-AD.

### (a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

### (b) Affected ADs

None.

## (c) Applicability

This AD applies to The Boeing Company Model 777-200, -200LR, -300, -300ER, and 777F series airplanes, certificated in any category; as identified in Boeing Alert Service Bulletin 777-55A0018, Revision 1, dated March 6, 2012.

# (d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 55, Stabilizers.

## (e) Unsafe Condition

This AD was prompted by reports of corrosion damage on the outer diameter chrome surface of the horizontal stabilizer pivot pins. Micro-cracks in the chrome plating of the pivot pins, some of which extended into the base metal, were also reported. We are issuing this AD to prevent a fractured horizontal stabilizer pivot pin, which may cause excessive horizontal stabilizer freeplay and structural damage significant enough to result in loss of control of the airplane.

## (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

## (g) Pivot Pin Replacement

At the applicable time specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 777-55A0018, Revision 1, dated March 6, 2012, except as required by paragraph (i) of this AD: Replace the pivot pins of the horizontal stabilizer with new or reworked pivot pins, including replacing the spacer with a new spacer or with one that

has been determined to be without corrosion damage or other irregularities; in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 777-55A0018, Revision 1, dated March 6, 2012.

### (h) Repetitive Inspections

At the applicable time specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 777-55A0018, Revision 1, dated March 6, 2012: Do detailed inspections for cracks, corrosion damage, or other irregularity of the outer and inner pivot pins; and an ultrasonic inspection for cracking of the outer pivot pins; and do all applicable corrective actions; in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 777-55A0018, Revision 1, dated March 6, 2012. Corrective actions must be done before further flight. Repeat the inspections at the applicable interval specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 777-55A0018, Revision 1, dated March 6, 2012.

# (i) Exception

Where paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 777-55A0018, Revision 1, dated March 6, 2012, specifies a compliance time "after the Revision 1 date of this service bulletin," this AD requires compliance within the specified compliance time "after the effective date of this AD."

## (j) Credit for Previous Actions

This paragraph provides credit for the actions specified in paragraphs (g) and (h) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin 777-55A0018, dated July 27, 2011.

## (k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal

inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD. Information may be e-mailed to:

## 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

- (2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.
- (3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

## (I) Related Information

For more information about this AD, contact James Sutherland, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6533; fax: 425-917-6590; e-mail: james.sutherland@faa.gov.

## (m) Material Incorporated by Reference

You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) of the following service information under 5 U.S.C. 552(a) and 1 CFR part 51:

- (1) Boeing Alert Service Bulletin 777-55A0018, Revision 1, dated March 6, 2012.
- (2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle,

Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; e-mail me.boecom@boeing.com; Internet https://www.myboeingfleet.com.

- (3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.
- (4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on May 11, 2012.

Michael Kaszycki, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2012-12087 Filed 05/24/2012 at 8:45 am; Publication Date: 05/25/2012]